2- TODO 1: Implement the iterative Binary search function in SparseArray.java and take screenshot of the code

Text

Description automatically generated

4- TODO 2: Write the following new test class in SparseArrayTestClass.java. Run the code, and take screenshots of the code and test case output

Graphical user interface, text, application

Description automatically generated

Take screenshots of the passed test cases and your fixed code and upload it to the lab report.Explain in your lab report what your approach to fix the code

To fix this code, I just incremented the size by one. When you confirm that the object can go into the array, you need to update the size before running any of the commands because if you don’t, it will detect an empty array due to size staying 0.

Graphical user interface, application

Description automatically generated

5- TODO 3: Write two test cases for the following conditions. Run the 2 test codes, and take screenshots of the code and test cases outputs

A screenshot of a computer

Description automatically generated with medium confidence

6- TODO 4: Inspect and run the following TransmissionTest code. Take a screenshot of the code and output

Graphical user interface, application

Description automatically generated

7- - TODO 5: The code above will not run. You will need to fix the test code as follows and take a screenshot:

Graphical user interface, text

Description automatically generated

2. CheckInvarients filters out the null values of the array and checks to see if count is equal to the number of non-null values in the array. Otherwise it throws the exception that there is a different value in size than there is detected in array.

3. Trasmission is able to get the current gear of car object and change the gear of the car object.